

EXAMINER'S AMENDMENT

1. . An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Sean F Sullivan (Reg. No. 38328) on 14 July 2009.

3. The claims have been amended as follows:

1. (currently amended) A method for dynamically associating type information about extensible messages in a service-oriented architecture, the method comprising:
configuring a simple object access protocol (SOAP) message header associated with a SOAP message body to include message meta-data and semantic type information describing at least a portion of the content of the SOAP message body so as to enable a receiver to interpret and process the content of the SOAP message body using the meta-data and semantic type information included in the SOAP message header, thereby facilitating a dynamic exchange of semantic type information and meta-data information for open content message exchange between a sender and the receiver, wherein the dynamic exchange of semantic type information and meta-data information for open content message exchange between the sender and the receiver is implemented without changing message format of the message body.

2. (original) The method of claim 1, wherein said SOAP message header includes an extensible markup language (XML) schema for an XML <any> type message.

3. (original) The method of claim 2, wherein said SOAP message header further includes at least one object system type.

4. (original) The method of claim 2, wherein said SOAP message header further includes a resource description framework (RDF) description of the message.

5. (original) The method of claim 2, wherein said SOAP message header further includes a reference to <any> data included within the body of the SOAP message.

6-30. (cancelled)

31. (currently amended) A system including at least one processor for synthesizing and processing dynamically associated meta-data associated with extensible markup language (XML) messages in service-oriented computer architecture, comprising:

a send side framework for generating message meta-data within a header of a simple object access protocol (SOAP) message having a SOAP message body, comprising a send side ~~SOAP handler~~ header processor configured to create said meta data, said meta data describing at least a portion of the content of said SOAP message body so as to enable a receiver to interpret and process the content of the SOAP message body using the meta-data and semantics included in the SOAP message header; and

a receive side framework for receiving said SOAP message and processing the semantics in the SOAP header, comprising a receive side SOAP header processor and at least one meta-data processor for processing said meta-data, said at least one meta-data processor being implemented with at least one of a SOAP processor and an XML processor;

said receive side framework further configured for retrieving semantic information and said meta-data from the SOAP header, and associating said semantic information and said meta-data during processing of the body of said SOAP message, wherein said semantic information and said meta-data is used to interpret the content of the SOAP message body, and wherein said at least one meta-data processor and said at least one of a SOAP processor and an XML processor are configured to validate and map the extensible XML messages;

wherein a dynamic exchange of semantic type information and meta-data information for open content message exchange between the sender and the receiver is implemented without changing message format of the message body.

32. (previously presented) The system of claim 31, wherein said at least one meta-data processor is implemented with at least one of:

a schema generator processor, said schema generator processor based on an XML schemaLocation attribute and namespace information associated with an extended XML message;

a resource description framework (RDF) processor for interpreting said semantic information; and

at least one native processor for managing type system and type mapping information.

33. (previously presented) The system of claim 31, wherein said send side framework further comprises a sender for associating the meta-data at runtime using application programming (API) interfaces.

34. (previously presented) The system of claim 31, wherein said send side framework further comprises a sender for associating the meta-data at runtime, said sender using a defined message extension policy for an XML message.

35. (previously presented) The system of claim 31, wherein said retrieving semantic information from the SOAP header further comprises implementing a server side SOAP handler to create one or more meta-data processors.

36. (previously presented) The system of claim 31, wherein said retrieving semantic information from the SOAP header further comprises implementing a SOAP engine to create one or more meta-data processors, based upon the meta-data contained within the SOAP header.

37. (previously presented) The system of claim 31, wherein said receive side framework further comprises an associating XML processor.

38. (previously presented) The system of claim 35, wherein said one or more meta-data processors created by said server side SOAP handler is configured to load an associated XML schema from a uniform resource identifier (URI) location specified in the SOAP header.

39. (previously presented) The system of claim 37, wherein said associating XML processor generates warning messages upon encountering at least one of XML elements and XML attributes that are unspecified by the XML schema.

40. (cancelled)

Allowable Subject Matter

4. Claims **1-5 and 31-39** are allowed.

5 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdou Karim Seye whose telephone number is 571-270-1062. The examiner can normally be reached on Monday - Friday 8:30 - 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sough Hyung can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/
Primary Examiner, Art Unit 2194

/Abdou Karim Seye/
Examiner, Art Unit 2194